DEPARTMENT OF THE ARMY TECHNICAL MANUAL
DEPARTMENT OF THE NAVY PUBLICATION
DEPARTMENT OF THE AIR FORCE TECHNICAL ORDER

TM 11-6625-1730-12
NAVAIR 16-306SM206-1
TO 33D7-71-5-1

MAINT SUPPORT
CENTER LIBRARY

OPERATOR AND ORGANIZATIONAL
MAINTENANCE MANUAL

TEST SET, RADIO DATA SET AN/GSM-206 AND ANTENNA ORIENTATION SET AN/GSM-207

DEPARTMENTS OF THE ARMY, THE NAVY, AND THE AIR FORCE

MAY 1968

TM 11-6625-1730-12
NAVAIR 16-306SM206-1
TO 33D7-71-5-1

TECHNICAL MANUAL
No. 11-6625-1730-12
NAVY PUBLICATION
NAVAIR 16-306SM206-1
TECHNICAL ORDER
No. 33D7-71-5-1

DEPARTMENTS OF THE ARMY,
THE NAVY, AND THE AIR FORCE

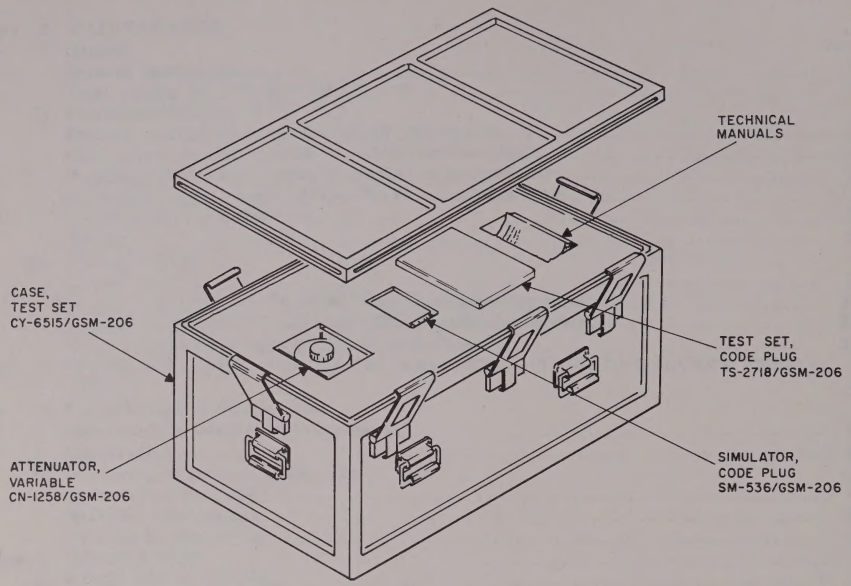
WASHINGTON, D.C., *31 May 1968*

Operator and Organizational Maintenance Manual

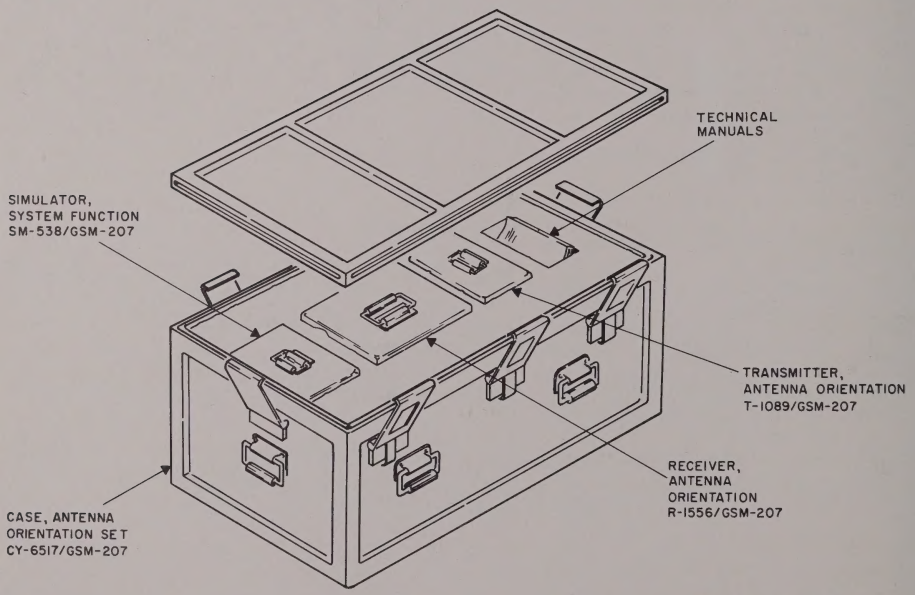
TEST SET, RADIO DATA SET AN/GSM-206 AND ANTENNA ORIENTATION SET AN/GSM-207

		Paragraph	Page
CHAPTER 1.	INTRODUCTION		
Section I.	General		
	Scope	1-1	1-1
	Indexes of publications	1-2	1-1
	Forms and records	1-3	1-1
II.	Description and Data		
	Purpose and use	1-4	1-1
	Technical characteristics	1-5	1-2
	Components and dimensions	1-6	1-2
	Description of Antenna Orientation Set AN/GSM-207	1-7	1-3
	Description of Simulator, System Function SM-538/GSM-207	1-8	1-3
	Description of Transmitter, Antenna Orientation T-1089/GSM-207	1-9	1-3
	Description of Receiver, Antenna Orientation R-1556/GSM-207	1-10	1-3
	Description of Test Set, Radio Data Set AN/GSM-206	1-11	1-3
	Description of Attenuator, Variable CN-1258/GSM-206	1-12	1-3
	Description of Simulator, Code Plug SM-536/GSM-206	1-13	1-3
	Description of Test Set, Code Plug TS-2718/GSM-206	1-14	1-8
	Additional equipment required	1-15	1-8
CHAPTER 2.	OPERATION		
Section I.	Service Upon Receipt of Equipment		
	Packaging data	2-1	2-1
	Checking unpacked equipment	2-2	2-1
	Initial checking and adjustment	2-3	2-1
II.	Operator's Controls and Indicators		
	General	2-4	2-1
	Simulator, System Function SM-538/GSM-207, controls and indicators	2-5	2-1
	Transmitter, Antenna Orientation T-1089/GSM-207, controls and indicators	2-6	2-3
	Receiver, Antenna Orientation R-1556/GSM-207, controls and indicators	2-7	2-3
	Attenuator, Variable CN-1258/GSM-206, controls and indicators	2-8	2-4
	Simulator, Code Plug SM-536/GSM-206, controls and indicators	2-9	2-5
	Test Set, Code Plug TS-2718/GSM-206, controls and indicators	2-10	2-6
III.	Operation Under Usual Conditions		
	General	2-11	2-6
	Antenna Orientation Set AN/GSM-207, turn on and turn off procedures	2-12	2-7
	Test Set, Radio Data Set AN/GSM-206, turn on and turn off procedures	2-13	2-7
	Operation under unusual conditions	2-14	2-8

		Paragraph	Page
CHAPTER 3.	MAINTENANCE		
Section I.	General		
	Scope of maintenance	3-1	3-1
	Tools, equipment, and materials required	3-2	3-1
II.	Preventive Maintenance		
	Preventive maintenance checks and services periods	3-3	3-1
	Daily preventive maintenance checks and services chart	3-4	3-1
	Monthly preventive maintenance checks and services chart	3-5	3-2
	Quarterly preventive maintenance checks and services chart	3-6	3-2
	Touchup painting instructions	3-7	3-2
	Cleaning	3-8	3-2
III.	Troubleshooting		
	General	3-9	3-2
	Antenna Orientation Set AN/GSM-207, troubleshooting chart	3-10	3-3
	Test Set, Radio Data Set AN/GSM-206, troubleshooting chart	3-11	3-4
	Repair, replacement, and adjustment instructions	3-12	3-4
CHAPTER 4.	SHIPMENT, LIMITED STORAGE, AND DEMOLITION TO PREVENT ENEMY USE		
Section I.	Shipment and Limited Storage		
	Disassembly and repacking equipment	4-1	4-1
	Repackaging	4-2	4-1
II.	Demolition to Prevent Enemy Use		
	Authority for demolition	4-3	4-1
	Methods of destruction	4-4	4-1
	Priorities for destruction	4-5	4-2
APPENDIX A.	REFERENCES		A-1
B.	BASIC ISSUE ITEMS		B-1
C.	MAINTENANCE ALLOCATION		C-1



A. AN/GSM-206



B. AN/GSM-207

Figure 1–1. Test Set, Radio Data Set AN/GSM–206 and Antenna Orientation Set AN/GSM–207.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1–1. Scope

a. This manual describes Test Set, Radio Data Set AN/GSM–206 (A, fig. 1–1) and Antenna Orientation Set AN/GSM–207 (B, fig. 1–1), and provides instructions for operation, maintenance, and demolition. It includes instructions for cleaning and checkout of the equipment.

b. The basic issue items list (BIIL) appears in appendix B; the maintenance allocation chart (MAC) appears in appendix C.

c. Appendixes B and C are current as of *30 April 1968*.

1–2. Indexes of Publications

a. DA Pam 310–4. Refer to DA Pam 310–4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. DA Pam 310–7. Refer to DA Pam 310–7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

1–3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Use equipment forms and records in accordance with instructions in TM 38–750.

b. Report of Packaging and Handling Deficiences. Fill out and forward DD Form 6 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700–58 (Army), NAVSUP Publication 378 (Navy), AFR 71–4 (Air Force), and MCO P4610–5 (Marine Corps).

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55–38 (Army), NAVSUP Publication 459 (Navy), AFM 75–34 (Air Force), and MCO P4610.19 (Marine Corps).

d. Report of Equipment Manual Improvements. Report of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications) and forwarded direct to Commanding General, U.S. Army Electronics Command, ATTN: AMSEL–ME–NMP–AD, Fort Monmouth, N.J. 07703.

Section II. DESCRIPTION AND DATA

1–4. Purpose and Use

a. Antenna Orientation Set AN/GSM–207 (B, fig. 1–1). The AN/GSM–207 is a portable test set consisting of three major components. It is used in the installation and maintenance of Radio Data Set AN/GSQ–113(V). Major components of the AN/GSM–207 are interconnected with the AN/GSQ–113(V) during tests; therefore, procedures for their use are included in TM 11–5895–698–12. Two components (Receiver, Antenna Orientation R–1556/GSM–207 and Transmitter, Antenna Orientation T–1089/GSM–207) provide the capability to position antennas of the AN/GSQ–113(V). The remaining component, Simulator, System Function SM–538/GSM–207, is used to perform system tests of Radio Data Set AN/GSQ–113(V).

b. Test Set, Radio Data Set AN/GSM–206 (A, fig. 1–1). The AN/GSM–206 is a portable test set consisting of three major components. It is used in direct support (DS), general support (GS), and depot maintenance of Radio Data Set AN/GSQ–113(V). The major components of the AN/GSM–206 are interconnected with Radio Data Set AN/GSQ–113(V) during tests; therefore, procedures for their use are included in TM 11–5895–698–35.

1–5. Technical Characteristics

a. Simulator, System Function SM–538/GSM–207.

Power input requirements.	—15 volts dc, supplied by Transmitter, Digital Data T–1063(P)/GSQ–113(V).
Signal inputs:	
Self-test:	
Type I	10 kc square wave.
Type II	2 cps sine wave.
Alarm signals	Switch closure from detector.
Signal outputs:	
Self-test:	
Type I	10-kc square wave to detectors.
Type II	2 cps sine wave to detectors.
Initiate	To Transmitter, Digital Data T–1063(P)/GSQ–113(V).
Alarm signals	Switch closure to Transmitter, Digital Data T–1063(P)/GSQ–113(V).

b. Transmitter, Antenna Orientation T–1089/GSM–207.

Power input requirements.	—30 volts dc (four internal Batteries, Dry BA–399/U connected in series-parallel configuration).
Battery life (new)	Continuous operation; 3 hours approximately.
Frequency	Refer to TM 11–6625–1730–45.
Power output	100 mw (minimum).
Modulation	Pulse-coded.

c. Receiver, Antenna Orientation R–1556/GSM–207.

Power input requirements.	+ and —15 volts dc (three internal BA–399/U batteries connected in parallel for —15 volts; one internal BA–399/U battery for +15 volts).
Battery life (new)	Continuous operation; 3 hours (approx).
Frequency	Refer to TM 11–6625–1730–45.

d. Attenuator, Variable CN–1258/GSM–206.

Frequency range	1,500 to 2,000 mc.
Dynamic range	10 to 100 db.
Input impedance	50 ohms (nominal).
Average power dissipation.	10 watts (maximum).

e. Simulator, Code Plug SM–536/GSM–206.

Power input requirements.	—12 volts dc and —5 volt dc (both supplied from equipment under test).
Number of preset frequency channels.	5.
Code selection	8 three-position switches.
Number of codes	10.

f. Test Set, Code Plug TS–2718/GSM–206.

Power input requirements.	—15 volts dc (one internal BA–399/U battery).
Battery life (new)	Approximately 1 year.

1–6. Components and Dimensions

Note. The listings are based on the original shipment by the contractor on order No. DAAB07–68–C–0200. For the current official listing of components, see the basic issue items list (app. B).

a. Components. The components of Antenna Orientation Set AN/GSM–207 and Test Set, Radio Data Set AN/GSM–206 are listed in paragraphs 1–7 through 1–14. Additional equipment required is listed in paragraph 1–15.

b. Antenna Orientation Set AN/GSM–207.

Item	Dimensions (in.)			Weight (lb)	Fig. No.
	Height	Depth	Width		
Case, Antenna Orientation Set CY–6517/GSM–207	12	19	45	[1] 44	1–1
Simulator, System Function SM–538/GSM–207	7	8	11	12	1–2
Transmitter, Antenna Orientation T–1089/GSM–207	9. 5	8	11	[2] 13. 5	1–3
Receiver, Antenna Orientation R–1556/GSM–207	12	8	11	[2] 17	1–4

[1] Empty. [2] With batteries.

c. Test Set, Radio Data Set AN/GSM–206.

Item	Dimensions (in.)			Weight (lb)	Fig. No.
	Height	Depth	Width		
Case, Test Set CY–6515/GSM–206	9	16. 5	20	[1] 22	1–1
Attenuator, Variable CN–1258/GSM–206	3. 5	7. 8	5. 5	4. 5	1–5
Simulator, Code Plug SM–536/GSM–206	6	2. 3	2. 7	1. 3	1–6
Test Set, Code Plug TS–2718/GSM–206	3. 6	8	11	[2] 4	1–7

[1] Empty. [2] With batteries.

1-7. Description of Antenna Orientation Set AN/GSM-207

(B, fig. 1-1)

The AN/GSM-207 consists of three major components contained in a watertight transit case. The case and its cover are lined with polyurethane foam, recessed to receive the components. Technical manuals are stored in the transit case. Also, each component case is watertight and provided with a relief valve to equalize pressure for air shipment.

1-8. Description of Simulator, System Function SM-538/GSM-207

(fig. 1-2)

The SM-538/GSM-207 has all controls and indicators on the front panel. The cable for interconnection of the SM-538/GSM-207 with Radio Data Set AN/GSQ-113(V) is permanently attached at the front panel. The SM-538/GSM-207 is used in initiating detector alarm signals to the AN/GSQ-113(V) and simulating detector malfunctions. It is also capable of monitoring the self-test signals sent from the AN/GSQ-113(V) to the detectors. During tests, the SM-538/GSM-207 interconnection cable is connected to the AN/GSQ-113(V) and the detector to AN/GSQ-113(V) interface cable is connected between the detectors and SM-538/GSM-207 panel connector J1. During tests in which the detector to AN/GSQ-113(V) interface cable is not used, the dummy plug fastened by the chain to the SM-538/GSM-207 front panel is inserted in connector J1.

1-9. Description of Transmitter, Antenna Orientation T-1089/GSM-207

(fig. 1-3)

The T-1089/GSM-207 is a self-contained portable transmitter. All controls and connections are on the front panel. Provision for mounting the test antenna (AT1) on the front panel is made by an antenna support clamp. The test antenna and a 12-inch radio frequency (RF) cable (2W1) are stored in an inner compartment of the T-1089/GSM-207 case cover. The RF cable assembly (2W1) consists of RG-223/U RF cable terminated by UG-536B/U RF connectors. Front panel access is provided for replacement of four internal batteries. The T-1089/GSM-207 transmits code-modulated, RF signals from the *antenna site* of Receiver, Digital Data R-1510/GSQ-113(V). These signals are received by Receiver, Antenna Orientation R-1556/GSM-207 at distant transmitter locations, decoded, and used to position accurately the AN/GSQ-113(V) transmitter antenna.

1-10. Description of Receiver, Antenna Orientation R-1556/GSM-207

(fig. 1-4)

The R-1556/GSM-207 is a self-contained portable receiver. During installation, the R-1556/GSM-207 is connected to a transmitter antenna of Radio Data Set AN/GSQ-113(V) and is used to position accurately the AN/GSQ-113(V) transmitter antenna. All controls and connectors and the battery compartment that houses three internal batteries are accessible at the front panel. A 5-foot RF cable (3W1), stored in the R-1556/GSM-207 case cover, is provided as an extension for the AN/GSQ-113(V) transmitter antenna cable. The RF cable (3W1) is comprised of RG-214/U RF cable terminated in a UG-230/U jack and UG-21E/U plug.

1-11. Description of Test Set, Radio Data Set AN/GSM-206

(A, fig. 1-1)

The AN/GSM-206 consists of three major components contained in a watertight transit case. The case and its cover are lined with polyurethane foam recessed to receive the components. Technical manuals are stored in the transit case.

1-12. Description of Attenuator, Variable CN-1258/GSM-206

(fig. 1-5)

The CN-1258/GSM-206 is used at the operating frequencies of Radio Data Set AN/GSQ-113(V). When connected between Receiver, Digital Data R-1510/GSQ-113(V) and Transmitter, Digital Data T-1063(P)/GSQ-113(V), it provides an adjustable loss path.

1-13. Description of Simulator, Code Plug SM-536/GSM-206

(fig. 1-6)

All operating controls of the SM-536/GSM-206 are located on the front panel. Electrical connections are made through the multiple-pin connector (P1) at the rear of the component. The SM-536/GSM-206 simulates the various code

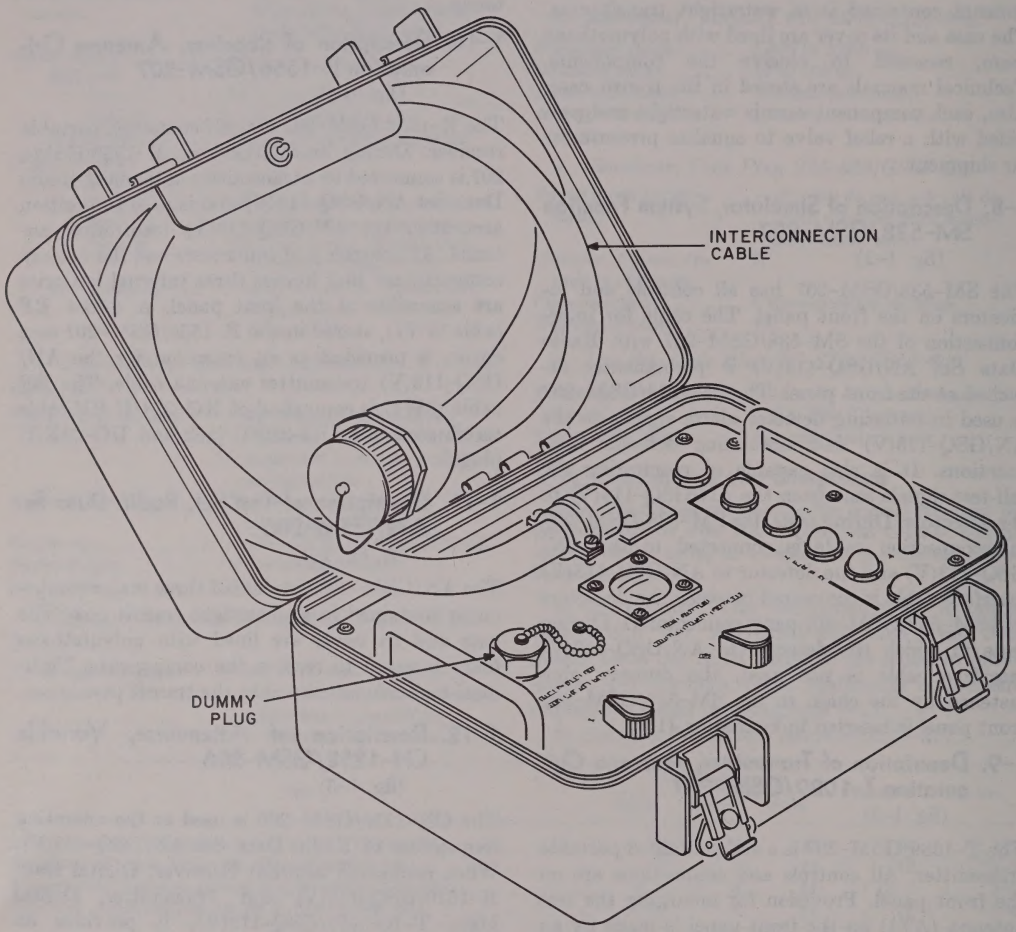


Figure 1-2. Simulator, System Function SM-538/GSM-207.

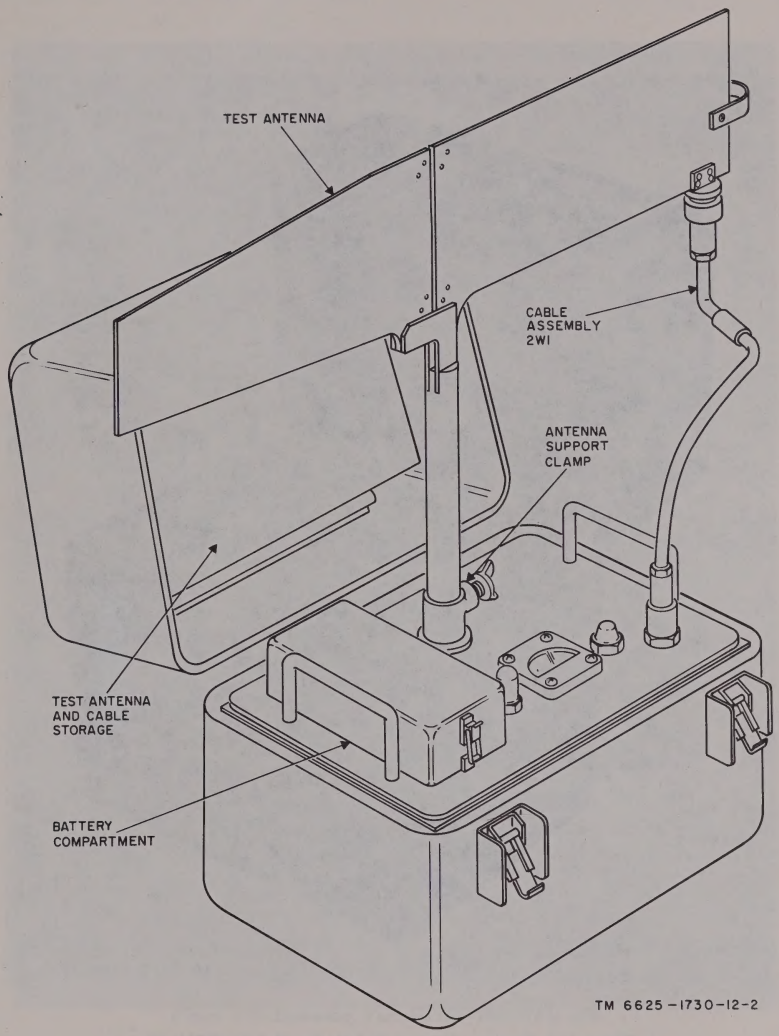


Figure 1-3. Transmitter, Antenna Orientation T-1089/GSM-207.

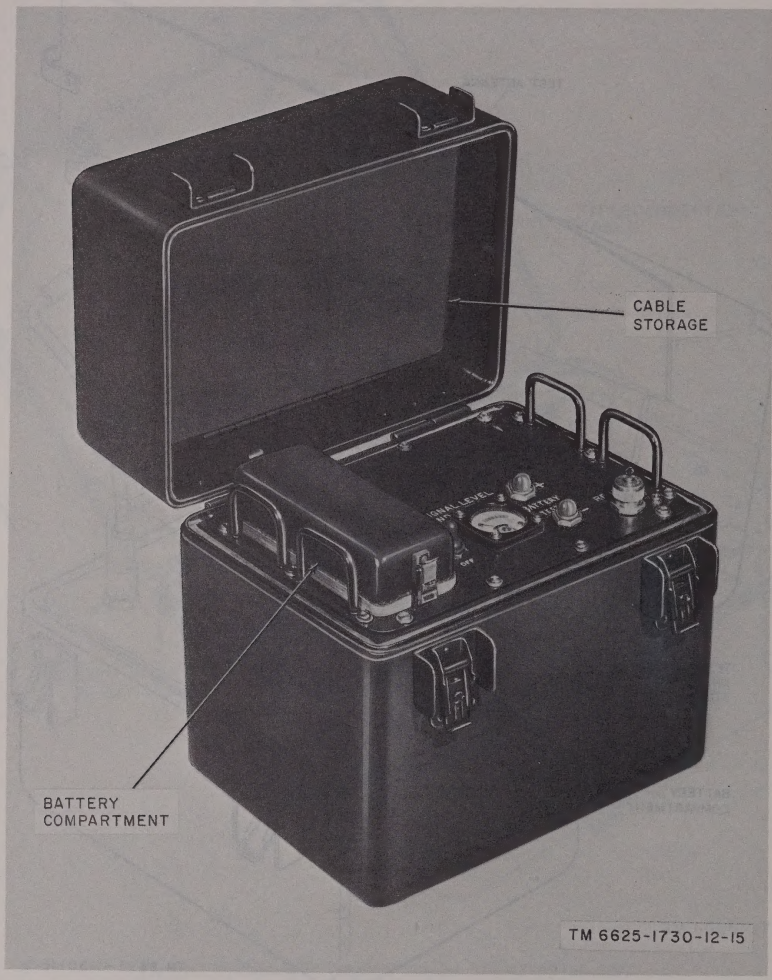


Figure 1–4. Receiver, Antenna Orientation R–1556/GSM–207.

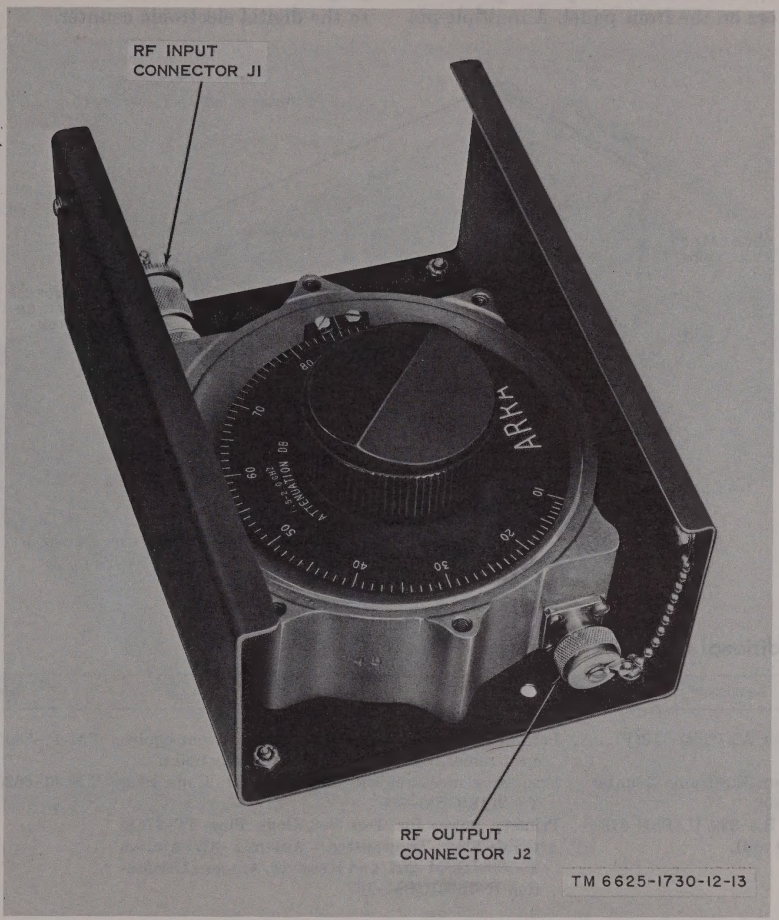


Figure 1-5. Attenuator, Variable CN-1258/GSM-206.

plugs and is used in testing capabilities of Radio Data Set AN/GSQ–113(V).

1–14. Description of Test Set, Code Plug TS–2718/GSM–206

(fig. 1–7)

The TS–2718/GSM–206 has all operating controls and connectors on the front panel. A multiple-pin connector (J1) allows direct insertion of the code plug under test. Front panel access is provided for internal battery replacement. The TS–2718/GSM–206 requires a digital electronic counter (not supplied) for testing the frequency of the code plugs. An RF connector is provided for connecting to the digital electronic counter.

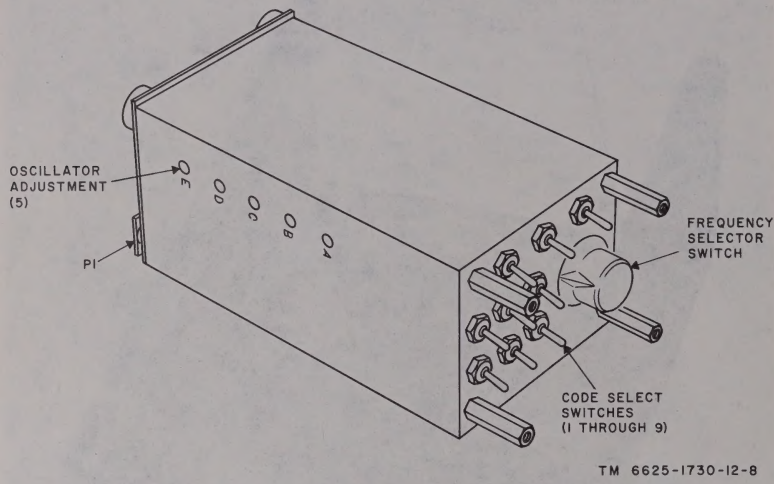


Figure 1–6. Simulator, Code Plug SM–536/GSM–206.

1–15. Additional Equipment Required

Equipment	Purpose	Reference
Radio Data Set AN/GSQ–113(V)-----	Performs function of telemetering data from equipment remote data collection and display point.	TM 11–5895–698–12
Digital Readout Electronic Counter AN/USM–207.	Frequency measurement with Test Set, Code Plug TS–2718/GSM–206.	TM 11–6625–700–10
Battery, Dry BA–399/U (FSN 6135–926–0845, 9 rqd).	Primary power for Test Set, Code Plug TS–2718/GSM–206; Transmitter, Antenna Orientation T–1089/GSM–207; and Receiver, Antenna Orientation R–1556/GSM–207.	

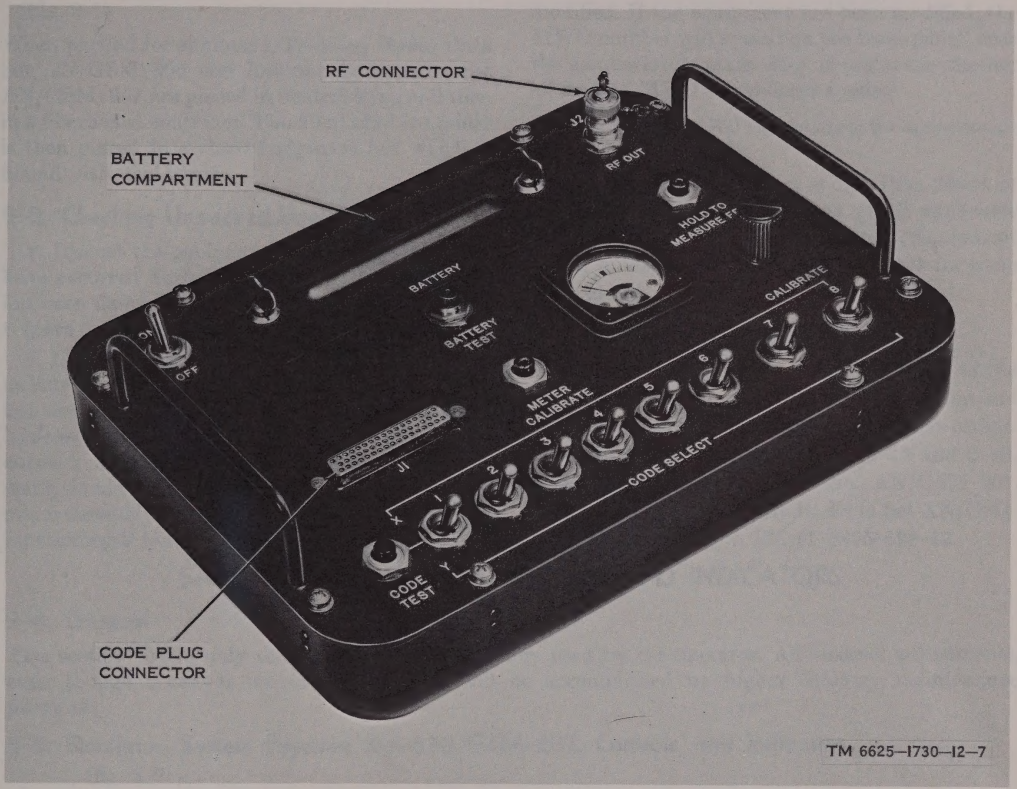
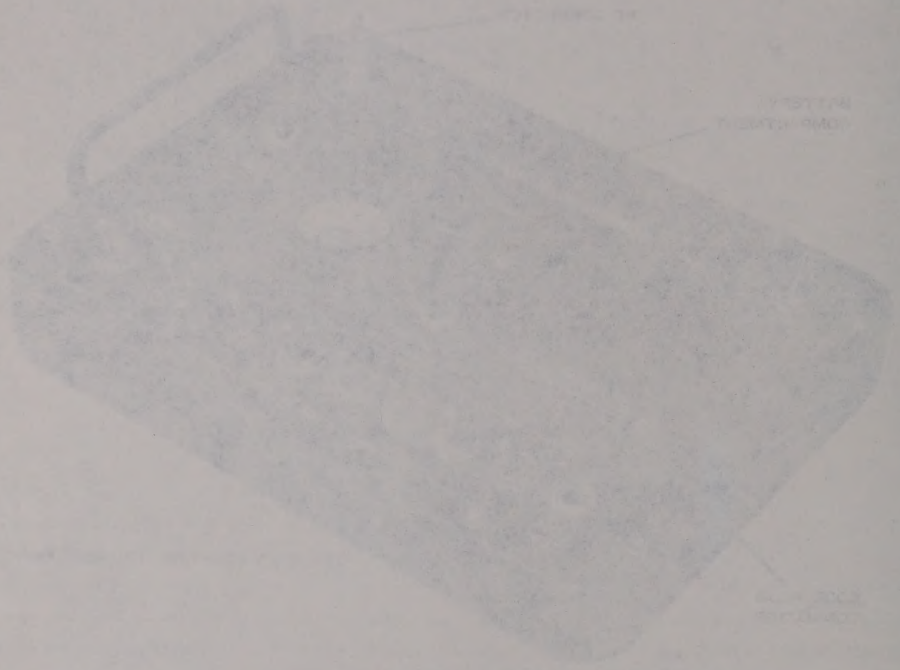


Figure 1–7. Test Set, Code Plug TS–2718/GSM–206.



CHAPTER 2
OPERATION

Section I. SERVICE UPON RECEIPT OF EQUIPMENT

2–1. Packaging Data
(fig. 2–1)

When packed for shipment, Test Set, Radio Data Set AN/GSM–206 and Antenna Orientation Set AN/GSM–207 are placed in neutral wrap and then in a fiberboard container. The fiberboard container is then placed in a cleated plywood box which is bound with steel straps.

2–2. Checking Unpacked Equipment

a. Inspect the equipment for damage that may have occurred during shipment. If the equipment has been damaged, fill out and forward DD Form 6 (para 1–3*b*).

b. Check to see that the equipment is complete as listed on the packaging slip. If a packing slip is not available, check the equipment against the basic issue items list (app. B). Report all discrepancies in accordance with TM 38–750. The equipment should be placed in service even throuh a minor assembly or part that does not affect proper functioning is missing.

c. Check to see whether the equipment has been modified. If the equipment has been modified, the MWO number will appear on the front panel, near the nomenclature plate. Also, check to see whether all current MWO's have been applied.

Note. Current MWO's applicable to the equipment are listed in DA Pam 310–7.

d. Check the latest issue of DA Pam 310–4 to see whether the latest editions of all applicable maintenance literature are on hand. (Equipment issued by depots may have been in stock for some time and may contain superseded manuals.)

2–3. Initial Checking and Adjustment

Initial checking and adjustment is limited to the installation of batteries (para 3–12). Turn on and turn off procedures, following installation of batteries, are covered in paragraphs 2–12 and 2–13. Operating instructions for the AN/GSM–207, as necessary for testing Radio Data Set AN/GSQ–113(V), are covered in TM 11–5895–698–12.

Section II. OPERATOR'S CONTROLS AND INDICATORS

2–4. General

This section covers only those controls and indicators used by the operator. All internal adjustments, even though access is provided externally, will be accomplished by higher category maintenance personnel.

2–5. Simulator, System Function SM–538/GSM–207, Controls and Indicators
(fig. 2–2)

Control, indicator, or connector	*Function*
SELF TEST pushbutton	Initiates self-test cycle for Transmitter, Digital Data T–1063(P)/GSQ–113(V).
ALARM pushbuttons (5)	Each pushbutton simulates an alarm signal from one detector.
SELF TEST COMMAND SELECTOR switch (six-position rotary).	Permits checking self-test response from Transmitter, Digital Data T–1063(P)/GSQ–113(V) to any of five detectors, or shutting off meter driver circuit.
SELF TEST TYPE SELECTOR switch (two-position rotary).	Sets meter driver circuit to detect either type I (10 kc) or type II (2 cps) signal.
Self test signal meter	Indicates in green area when detector is activated.
Cable	Connects SM–538/GSM–207 to Transmitter, Digital Data T–1063(P)/GSQ–113(V).
Connector J1	Connects detectors to SM–538/GSM–207.
Dust cap and shorting plug for connector J1	Provides powerline interlock for Transmitter, Digital Data T–1063(P)/GSQ–113(V) under test.

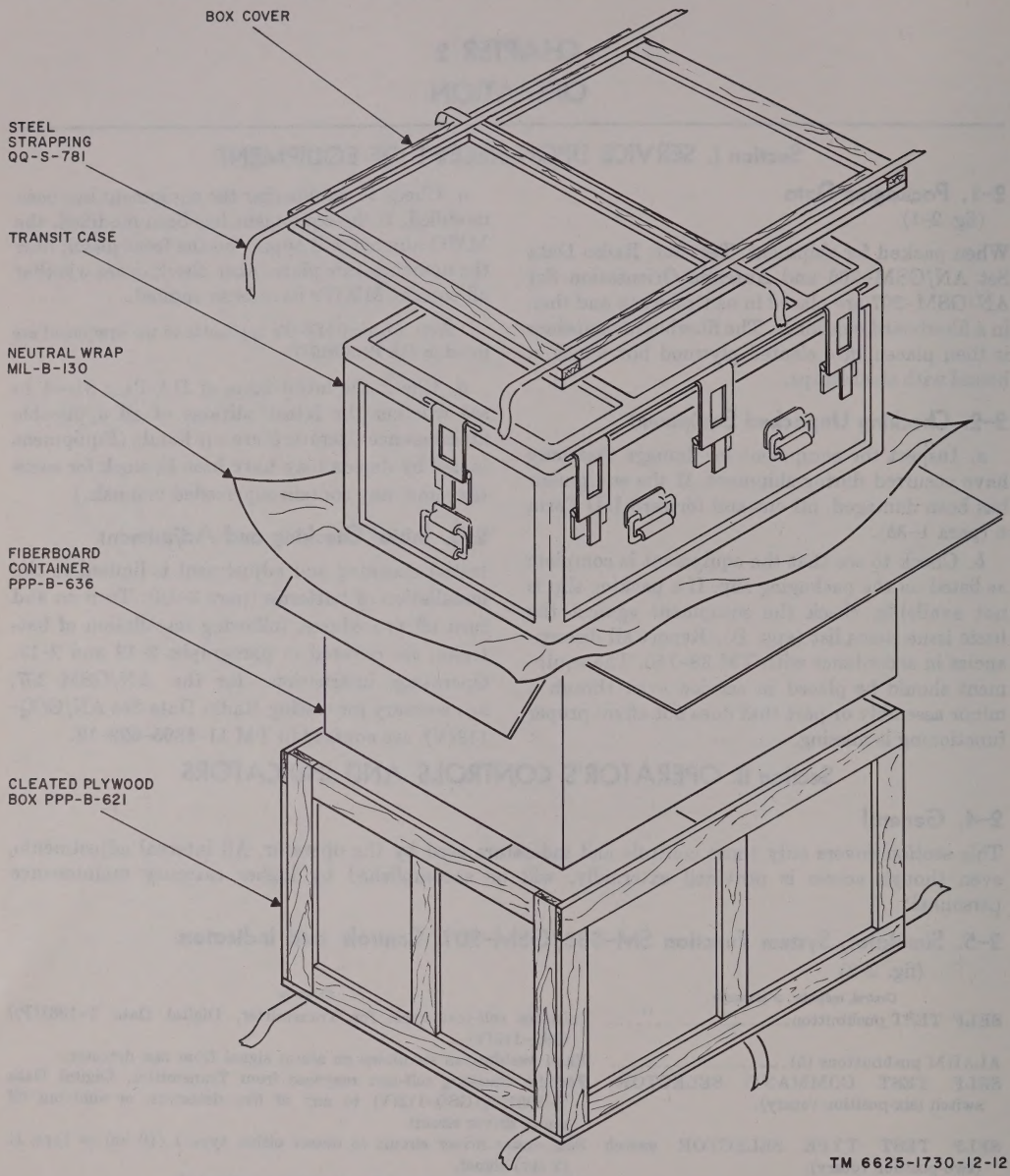


Figure 2-1. Antenna Orientation Set AN/GSM-207 or Test Set, Radio Data Set AN/GSM-206, typical packaging diagram.

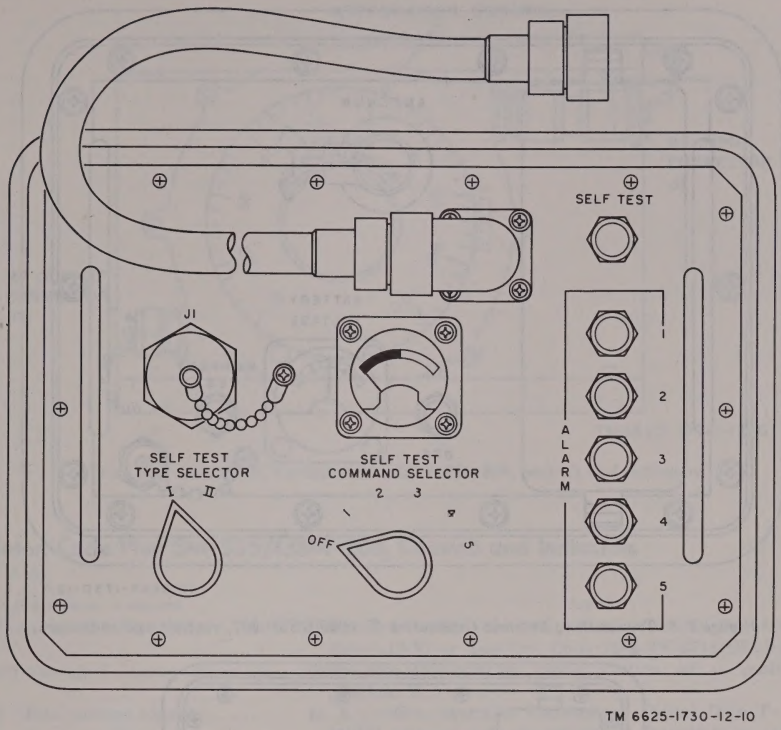


Figure 2–2. Simulator, System Function SM–538/GSM–207, controls and indicators.

2–6. Transmitter, Antenna Orientation T–1089/GSM–207, Controls and Indicators

(fig. 2–3)

Control, indicator, or connector	*Function*
ON–OFF switch (two-position toggle)	Turns equipment on or off.
BATTERY TEST pushbutton	Allows battery voltage condition to be indicated on BATTERY VOLTAGE meter.
RF OUT connector J1	Connects T–1089/GSM–207 to test antenna through cable assembly.
ANTENNA support clamp	Holds test antenna in vertical position.
Test antenna (stored in case cover)	Provides directional radiation pattern for T–1089/GSM–207.
BATTERY VOLTAGE meter	Indicates voltage condition of batteries.

2–7. Receiver, Antenna Orientation R–1556/GSM–207, Controls and Indicators

(fig. 2–4)

Control, indicator, or connector	*Function*
POWER ON–OFF switch (two-position toggle).	Turns equipment on or off.
BATTERY TEST pushbottons (+ and −).	Allow battery voltage condition to be indicated on SIGNAL LEVEL AND BATTERY meter.
SIGNAL LEVEL AND BATTERY meter	Indicates received signal strength or battery voltage condition.
RF IN connector J1	Connects to Transmitter, Digital Data T–1063(P)/GSQ–113(V) antenna under test.

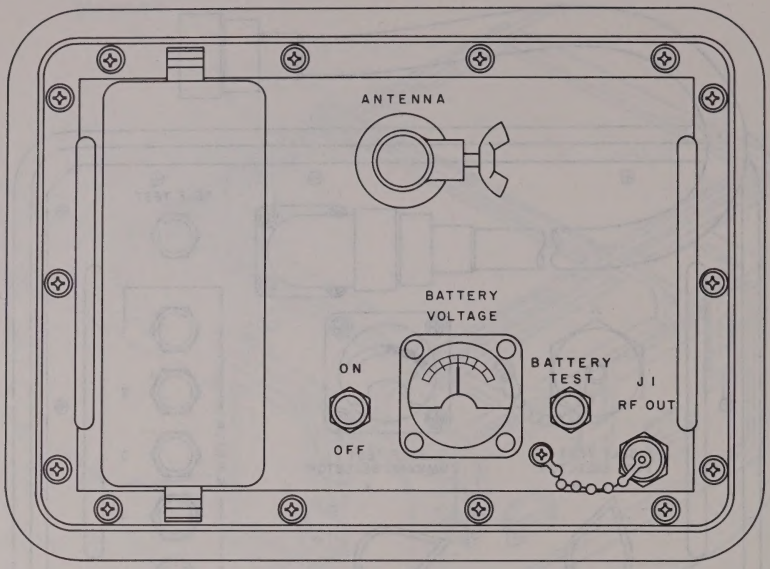


Figure 2–3. Transmitter, Antenna Orientation T–1089/GSM–207, controls and indicators.

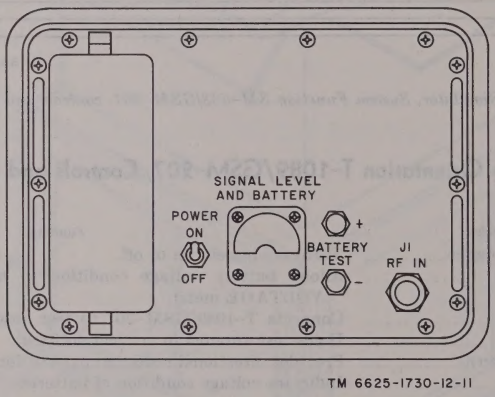


Figure 2–4. Receiver, Antenna Orientation R–1556/GSM–207, controls and indicators.

2–8. Attenuator, Variable CN–1258/GSM–206, Controls and Indicators

(fig. 2–5)

Control, indicator, or connector	*Function*
RF input connector J1	Connects CN–1258/GSM–206 to Transmitter, Digital Data T–1063(P)/GSQ–113(V) under test.
RF output connector J2	Connects CN–1258/GSM–206 to Receiver, Digital Data R–1510/GSQ–113(V) under test.
Attenuation control	Varies signal level input to Receiver, Digital Data R–1510/GSQ–113(V).

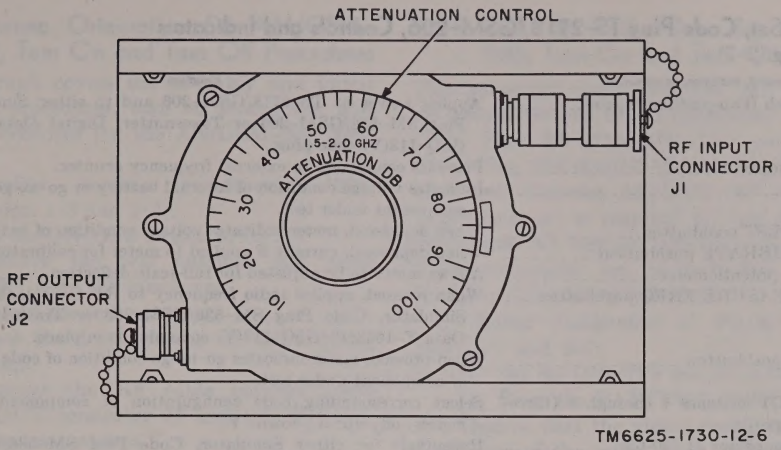


Figure 2-5. Attenuator, Variable CN-1258/GSM-206, controls and indicators.

2-9. Simulator, Code Plug SM-536/GSM-206, Controls and Indicators

(fig. 2-6)

Control, indicator, or connector	*Function*
Connector P1 (on rear of component)	Connects SM-536/GSM-206 to Transmitter, Digital Data T-1063 (P)/GSQ-113(V) or Test Set, Code Plug TS-2718/GSM-206.
X-Y switches 1 through 8 (three-position toggles).	Select code configuration; center position: off; up position: X; down position: Y.
X-Y switch 9 (three-position toggle)	In X position, overrides Transmitter, Digital Data T-1063(P)/GSQ-113(V) power supply shutoff circuit, leaving it on continuously. In center or Y position, does not override power supply shutoff circuit.
X-Y channel switch 10 (five-position rotary)	Selects one of five preset frequency channels.

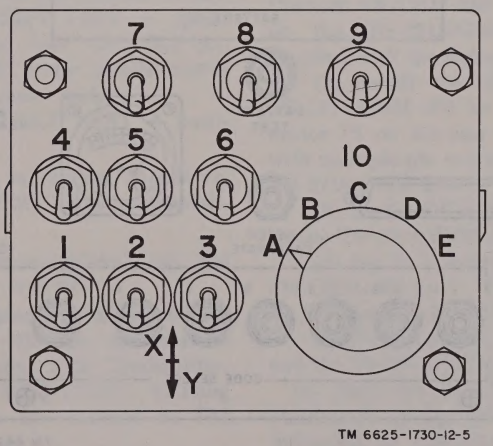


Figure 2-6. Simulator, Code Plug SM-536/GSM-206, controls and indicators.

2–10. Test Set, Code Plug TS–2718/GSM–206, Controls and Indicators

(fig. 2–7)

Control, indicator, or connector	*Function*
ON–OFF switch (two-position toggle)	Applies power to TS–2718/GSM–206 and to either Simulator, Code Plug SM–536/GSM–206 or Transmitter, Digital Data T–1063(P)/GSQ–113(V) code plug.
RF OUT connector J2	Provides connection to external frequency counter.
Meter	Indicates voltage condition of internal battery or go–no-go condition of component under test.
BATTERY TEST pushbutton	When depressed, meter indicates voltage condition of battery.
METER CALIBRATE pushbutton	When depressed, current is applied to meter for calibration.
CALIBRATE potentiometer	Allows meter to be adjusted for full-scale deflection.
HOLD TO MEASURE FREQ pushbutton	When pressed, applies radio frequency to RF OUT jack when either Simulator, Code Plug SM–536/GSM–206 or Transmitter, Digital Data T–1063(P)/GSQ–113(V) code plug is in place.
CODE TEST pushbutton	When pressed, meter indicates go–no-go condition of code configuration of component under test.
CODE SELECT switches 1 through 8 (three-position toggles).	Select corresponding code configuration of component under test; center: off; up: X; down: Y.
Multiple-pin connector J1 (50-pin)	Receptacle for either Simulator, Code Plug SM–536/GSM–206 or Transmitter, Digital Data T–1063(P)/GSQ–113(V) code plug.

Section III. OPERATION UNDER USUAL CONDITIONS

2–11. General

This section describes the necessary action to place components of Antenna Orientation Set AN/GSM–207 and Test Set, Radio Data Set AN/GSM–206 into operation. Techniques required for using the AN/GSM–207 in conjunction with the AN/GSQ–113(V) are covered in TM 11–5895–698–12. Techniques required for using the AN/GSM–206 in conjunction with the AN/GSQ–113(V) are covered in TM 11–5895–698–35.

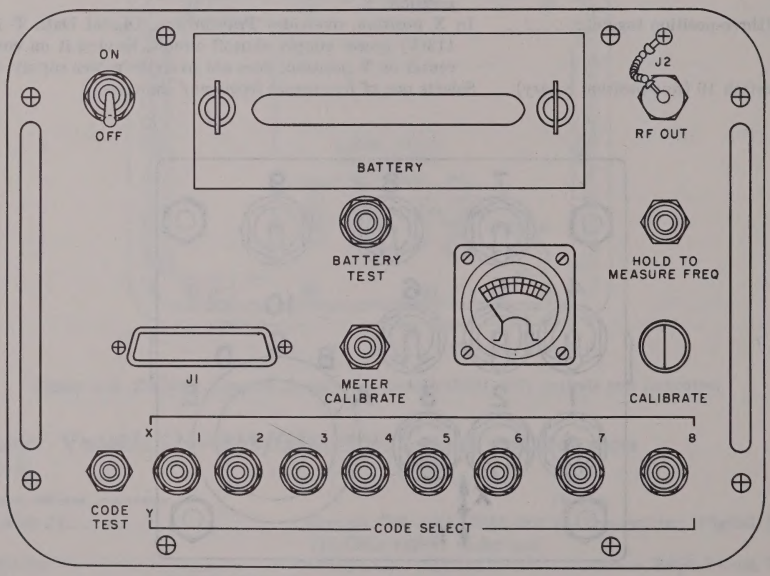


Figure 2–7. Test Set, Code Plug TS–2718/GSM–206, controls and indicators.

2–12. Antenna Orientation Set AN/GSM–207, Turn On and Turn Off Procedures

This paragraph covers the assembly and initial adjustment procedures, turn on procedures, and turn off procedures for the AN/GSM–207 components.

a. Transmitter, Antenna Orientation T–1089/GSM–207 (figs. 1–3 and 2–3).

(1) Set the ON–OFF switch to OFF.

(2) Remove the test antenna and cable assembly 2W1 from the case cover.

(3) Unfold the test antenna.

(4) Place the test antenna in the antenna support clamp.

(5) Connect the RF cable between front panel RF OUT connector J1 and the RF connector on the test antenna.

(6) Tighten the antenna support clamp retaining screw.

(7) Set the ON–OFF switch to ON. Press the BATTERY TEST pushbutton and observe that the BATTERY VOLTAGE meter needle moves into the green area of the meter scale.

(8) Release the BATTERY TEST pushbutton.

(9) To turn off the equipment, set the ON–OFF switch to OFF, disconnect the RF cable, fold the test antenna, and place both parts in the case cover.

b. Receiver, Antenna Orientation R–1556/GSM–207 (figs.) 1–4 and 2–4).

(1) Set the POWER ON–OFF switch to ON.

(2) Press the BATTERY TEST + (plus) pushbutton and observe that the SIGNAL LEVEL AND BATTERY meter needle moves into the green area of the meter scale.

(3) Release the BATTERY TEST + pushbutton.

(4) Repeat the steps in (2) and (3) above, using the BATTERY TEST −(minus) pushbutton.

(5) To turn off the equipment, set the POWER ON–OFF switch to OFF.

c. Simulator, System Function SM–538/GSM–207. The SM–538/GSM–207 has no internal source of power. It is used with Transmitter, Digital Data T–1063(P)/GSQ–113(V). Starting procedures and operation are covered in TM 11–5895–698–35.

2–13. Test Set, Radio Data Set AN/GSM–206, Turn On and Turn Off Procedures

This paragraph covers only the turn on and turn off procedures and initial calibration of Test Set, Code Plug TS–2718/GSM–206 and Simulator, Code Plug SM–536/GSM–206. Digital Readout Electronic Counter AN/USM–207 (digital electronic counter) is required for use during these procedures. No turn on, turn off, or initial adjustment procedures are required for Attenuator, Variable CN–1258/GSM–206.

a. Initial Calibration of TS–2718/GSM–206 (figs. 1–7 and 2–7).

(1) Set the ON–OFF switch to ON.

(2) Press the BATTERY TEST pushbutton and observe that the meter needle moves to the green area of the meter scale. Release the BATTERY TEST pushbutton.

(3) Press the METER CALIBRATE pushbutton. Calibrate the meter by adjusting the CALIBRATE potentiometer until the meter needle moves to the extreme right mark of the meter scale. Release the METER CALIBRATE pushbutton when calibration is confirmed.

(4) Set the ON–OFF switch to OFF.

b. Operation of TS–2718/GSM–206 Using SM–536/GSM–206 (figs. 2–6 and 2–7).

Note. If any indications, other than those described in the following procedure occur, higher category maintenance is required.

(1) Connect Digital Readout Electronic Counter AN/USM–207 to RF OUT connector J2 on the TS–2718/GSM–206, using the cable supplied with the digital electronic counter.

(2) Install the SM–536/GSM–206 in the TS–2718/GSM–206 by aligning multiple-pin connector P1 on the rear of the SM–536/GSM–206 with multiple-pin connector J1 on the front of the TS–2718/GSM–206.

(3) Set CODE SELECT switches 1 through 8 on the TS–2718/GSM–206 to X.

(4) Set X–Y switches 1 through 8 on the SM–536/GSM–206 to X. Set X–Y switch 9 to Y. Set X–Y channel switch 10 to A.

(5) Turn on the digital electronic counter and the TS–2718/GSM–206.

(6) Press the HOLD TO MEASURE FREQ pushbutton on the TS–2718/GSM–206. A direct indication of frequency should appear on the

digital electronic counter. Compare the frequency with that given in TM 11–5895–698–35. Release the HOLD TO MEASURE FREQ pushbutton.

(7) In turn, rotate X–Y channel switch 10 on the SM–536/GSM–206 to positions B, C, D, and E, repeating the procedure given in (6) above.

(8) Press the CODE TEST pushbutton on the TS–2718/GSM–206. The meter needle should point in the black area (midscale).

(9) With the CODE TEST pushbutton pressed and the meter needle at midscale, set each CODE SELECT switch on the TS–2718/GSM–206, one at a time, to Y and then back to X. While each switch is set to Y, the meter needle should return to zero.

(10) Repeat the procedure in (9) above, using X–Y switches 1 through 8 on the SM–536/GSM–206.

(11) Set CODE SELECT switches 1 through 8 on the TS–2718/GSM–206 to Y. Set X–Y switches 1 through 8 on the SM–536/GSM–206 to Y.

(12) Press the CODE TEST pushbutton on the TS–2718/GSM–206. The meter needle should point in the black area (midscale).

(13) With the CODE TEST pushbutton pressed and the meter needle at midscale, set each CODE SELECT switch on the TS–2718/GSM–206, one at a time, to its center position and then back to Y. While each switch is in the center position, the meter needle should return to zero.

(14) Repeat the procedure in (13) above, using X–Y switches 1 through 8 on the SM–536/GSM–206.

(15) Set all X–Y switches and CODE SELECT switches to the center position. Turn off the TS–2718/GSM–206 and the digital electronic counter.

2–14. Operation Under Unusual Conditions

No special operating procedures are given for operation during adverse weather conditions. If components of the AN/GSM–206 and AN/GSM–207 are subjected to climatic conditions such as salt air, dust storms, sand storms, or similar conditions, the operator should immediately perform the preventive maintenance procedures described in paragraphs 3–4, 3–5, and 3–6.

CHAPTER 3
MAINTENANCE

Section I. GENERAL

3–1. Scope of Maintenance

This chapter contains instructions covering maintenance of Antenna Orientation Set AN/GSM–207 and Test Set, Radio Data Set AN/GSM–206. Maintenance duties assigned are listed below, together with a reference to the paragraph covering the specific maintenance function.

a. Daily preventive maintenance checks and services (para 3–4).

b. Monthly preventive maintenance checks and services (para 3–5).

c. Quarterly preventive maintenance checks and services (para 3–6).

d. Repainting and refinishing instructions (para 3–7).

e. Cleaning (para 3–8).

f. Troubleshooting (paras 3–9 through 3–11).

g. Repair, replacement, and adjustment instructions (para 3–12).

Note. No lubrication of the equipment is required.

3–2. Tools, Equipment, and Materials Required

No special test equipment or tools are required. Following is a list of materials that are required:

a. Camel's-hair brush (FSN 8020–245–4509).

b. Cleaning compound (FSN 7930–395–9542).

c. Fine sandpaper (FSN 5350–235–0136)..

d. Soft, clean, lint free cloth (FSN 8305–170–5062).

Section II. PREVENTIVE MAINTENANCE

3–3. Preventive Maintenance Checks and Services Periods

Preventive maintenance checks and services of AN/GSM–206 and AN/GSM–207 performed by organizational personnel are required daily, monthly, and quarterly. Paragraph 3–4 specifies checks and services to be accomplished daily; paragraphs 3–5 and 3–6 specify additional checks and services that must be accomplished on a monthly and quarterly basis, respectively.

3–4. Daily Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1	Completeness	See that equipment is complete	App. B.
2	Connectors	Check tightness of all connectors	None.
3	Switches and controls	Check for proper mounting of all switches and controls, and verify that there is no slippage or binding in their action.	None.
4	Meters	Inspect glass for cracks, looseness, and discoloration.	None.
5	Cleanliness	See that exterior surfaces of each component of test sets are clean and dry, and free of dirt, grease, fungus, and corrosion. Clean if necessary.	Para 3–8.
6	Batteries	Check condition of batteries in Test Set, Code Plug TS–2718/GSM–206; Receiver, Antenna Orientation R–1556/GSM–207; and Transmitter, Antenna Orientation T–1089/GSM–207.	Para 3–12*b*, *c*, and *d*.

3–5. Monthly Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1	Cables	Inspect cable connectors for corrosion and bent pins. Replace as necessary. Inspect all cables for cracks, cuts, or badly chaffed areas.	None.
2	Handles	Inspect handles, latches, and hinges for looseness.	If repair is necessary, refer to higher category maintenance.
3	Metal surfaces	Inspect exposed metal surfaces for scratches and corrosion. Clean and touch up paint as required.	Paras 3–7 and 3–8.
4	Operation	Perform starting procedures	Paras 2–12 and 2–13.

3–6. Quarterly Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1	System performance test	Check T–1089/GSM–207 and R–1556/GSM–207, using CN–1258/GSM–206.	Perform system performance test (TM 11–6625–1730–45).
2	Publications	Check to see that all publications are complete, serviceable, and current.	DA Pam 310–4.
3	Modification work orders	Check DA Pam 310–7 to determine if new applicable MWO's have been published.	DA Pam 310–7.
4	Spare parts	Check all spare parts for general condition and method of storage. No overstock should be evident, and all shortages must be on valid requisitions.	None.
5	Interior components	Inspect interior components for evidence of overheating, arcing, leakage, and other deterioration. Clean as necessary.	If repair is necessary, refer to higher maintenance category.

3–7. Touchup Painting Instructions

Remove corrosion from metal surfaces by lightly sanding them with fine sandpaper. Refer to TB SIG 364 for applicable cleaning and refinishing practices and SB 11–573 for specified paints or finishes.

3–8. Cleaning

Inspect the exterior surfaces of each component. Exterior surfaces should be clean and free of dirt.

a. Remove loose dirt with a soft, clean, lint free cloth.

Warning: **Prolonged breathing of cleaning compound is dangerous; provide adequate ventilation. Cleaning compound is flammable; do not use near open flame.**

b. Remove grease, fungus, and ground-in dirt from surfaces other than front panels with a cloth dampened (not wet) with cleaning compound.

c. Remove dirt from plugs and jacks with a camel's-hair brush.

d. Clean the front panels, indicators, and control knobs with a soft, clean, lint free cloth. If dirt is difficult to remove, dampen the cloth with water. Use a mild soap if necessary.

Section III. TROUBLESHOOTING

3–9. General

Troubleshooting Antenna Orientation Set AN/GSM–207 and Test Set, Radio Data Set AN/GSM–206 is based primarily on symptoms observed during performance of daily and monthly preventive maintenance checks and services or during installation or maintenance of Radio Data Set AN/GSQ–113(V). Paragraphs 3–10 and 3–11

list symptoms occurring during operational tests and periodic maintenance checks. Probable trouble and corrective actions are given for each symptom in the troubleshooting charts.

3–10. Antenna Orientation Set ANG/SM-207, Troubleshooting Chart

a. Simulator, System Function SM–538/GSM–207.

Item	Symptom	Probable trouble	Corrective action
1	No self-test signal meter indication in any SELF TEST COMMAND SELECTOR switch position when SELF TEST pushbutton is pressed (operational test).	*a.* SELF-TEST TYPE SELECTOR switch in incorrect position.	*a.* Place in proper position.
		b. Dirty or improperly seated connector.	*b.* Clean or seat as necessary (para 3–8).
		c. Defective Transmitter, Digital Data T–1063(P)/GSQ–113(V).	*c.* Refer to TM 11–5895–698–12.
		d. Defective part	*d.* Repairs required by higher category maintenance.
2	Self-test signal meter indicates in one position only of SELF-TEST COMMAND SELECTOR switch when SELF TEST pushbutton is pressed (operational test).	*a.* Dirty or improperly seated connector.	*a.* Clean or seat as necessary (para 3–8).
		b. Defective SELF-TEST COMMAND SELECTOR switch.	*b.* Repairs required by higher category maintenance.
		c. Defective detectors	*c.* Refer to applicable manual.
3	None, or not all, alarms are registered on Receiver, Digital Data R–1510/GSQ–113(V) when all ALARM pushbuttons are pressed (operational test).	*a.* Improperly seated cable connector	*a.* Seat properly.
		b. Defective Transmitter, Digital Data T–1063(P)/GSQ–113(V).	*b.* Refer to TM 11–5895–698–12.
		c. Defective Receiver, Digital Data R–1510/GSQ–113(V).	*c.* Refer to TM 11–5895–698–12.

b. Transmitter, Antenna Orientation T–1089/GSM–207.

Symptom	Probable trouble	Corrective action
No signal indication at Receiver, Antenna Orientation R–1556/GSM–207 (operational test).	*a.* Defective RF cable 2W1 to test antenna.	*a.* Replace cable.
	b. T–1089/GSM–207 inoperative	*b.* Perform system performance test (TM 11–6625–1730–45).
	c. Weak batteries	*c.* Replace batteries (para 3–12*b*).
	d. Test antenna defective	*d.* Replace, if damaged. Test antenna is assumed to be good if no physical damage is present.
	e. Obstruction or contour of terrain blocks signal.	*e.* Refer to TM 11–5895–698–12.

c. Receiver, Antenna Orientation R–1556/GSM–207.

Symptom	Probable trouble	Corrective action
No signal level indication on meter (operational test).	*a.* AN/GSQ–113(V) transmitter antenna not properly positioned, or obstructed by terrain.	*a.* Refer to TM 11–5895–698–12.
	b. Defective RF cable 3W1 to AN/GSQ–113(V) transmitter antenna.	*b.* Replace cable.
	c. Defective AN/GSQ–113(V) transmitter antenna.	*c.* Refer to TM 11–5895–698–12.
	d. R–1556/GSM–207 inoperative	*d.* Perform system performance test (TM 11–6625–1730–45).
	e. Weak batteries	*e.* Replace batteries (para 3–12*c*).

3–11. Test Set, Radio Data Set AN/GSM–206, Troubleshooting Chart

a. Attenuator, Variable CN–1258/GSM–206.

Symptom	Probable trouble	Corrective action
Suspected inaccuracy (operational test).	*a.* Physical damage	*a.* Repair and calibration required by higher category maintenance.
	b. Defective AN/GSQ–113(V) RF cables.	*b.* Replace RF cables (TM 11–5895–698–35).

b. Simulator, Code Plug SM–536/GSM–206.

Item	Symptom	Probable trouble	Corrective action
1	No output to digital electronic counter (any channel). (Monthly check, para 3–5, sequence No. 4.)	*a.* Bent or broken pin in multiple-pin connector P1.	*a.* Straighten pin or have connector replaced by higher category maintenance.
		b. X–Y switch 9 not in Y position.	*b.* Set switch 9 to Y.
2	Code selection inoperative (operational test).	*a.* Error in presetting CODE SELECT switches.	*a.* Refer to chart for correct code configuration (TM 11–5895–698–35).
		b. Defective part in SM–536/GSM–206.	*b.* Repairs required by higher category maintenance.

c. Test Set, Code Plug TS–2718/GSM–206.

Item	Symptom	Probable trouble	Corrective action
1	Meter will not calibrate (battery tests good). (Monthly check, para 3–5, sequence No. 4.)	Defective part in TS–2718/GSM–206.	Repair required by higher category maintenance.
2	No frequency indication on digital electronic counter. (Monthly check, para 3–5, sequence No. 4.)	*a.* Defective code plug	*a.* Replace with a known good code plug or Simulator, Code Plug SM–536/GSM–206.
		b. Defective part in TS–2718/GSM–206.	*b.* Repairs required by higher category maintenance.
3	Incorrect indication on meter when code switch configuration is correct.	Defective part in TS–2718/GSM–206.	Repairs required by higher category maintenance.

3–12. Repair, Replacement, and Adjustment Instructions

a. Repairs and internal adjustments will be made only by higher category maintenance personnel. For organizational maintenance category, replacement of parts is limited to the replacement of batteries.

b. The T–1089/GSM–207 (fig. 1–3) requires four BA–399/U batteries. Replace the batteries as follows:

(1) Remove the battery cover by releasing the two fasteners.

(2) Disconnect each plug from its battery, and lift the old batteries out of the compartment.

(3) Install new batteries in the compartment in the vertical position.

(4) Connect the new batteries, making sure each battery receptacle is oriented with the pins of the plug.

(5) Replace the cover, and tighten the two fasteners.

c. The R-1556/GSM-207 (fig. 1-4) requires four BA-399/U batteries. Replace the batteries as follows:

(1) Remove the battery cover by releasing the two fasteners.

(2) Disconnect each plug from its battery, and lift the old batteries out of the compartment.

(3) Install the new batteries in the compartment in the vertical position.

(4) Connect the new batteries, making sure each battery receptacle is oriented with the pins of the plug.

(5) Replace the cover, and tighten the two fasteners.

d. The TS-2718/GSM-206 (fig. 1-7) requires one BA-399/U battery. Replace the battery as follows:

(1) Remove the battery cover by releasing the two press-to-lock-unlock fasteners.

(2) Disconnect the plug from the battery and remove the battery.

(3) Connect a new battery, making sure the battery receptacle is oriented with the pins of the plug.

(4) Place the battery in the compartment, replace the cover, and lock the two fasteners.

CHAPTER 4

SHIPMENT, LIMITED STORAGE, AND DEMOLITION TO PREVENT ENEMY USE

Section I. SHIPMENT AND LIMITED STORAGE

4–1. Disassembly and Repacking Equipment

Prepare components of Test Set, Radio Data Set AN/GSM–206 and Antenna Orientation Set AN/GSM–207 for shipment and limited storage as follows:

a. Disconnect all test cables, coil them, and store them in the foam lined compartments of the appropriate component case covers.

b. Replace the technical manuals inside the transit cases.

c. Install the dust covers provided on all connectors.

d. Remove all batteries before storage or shipping.

e. Position the six major components in the transit cases (fig. 1–1), so that exposed hardware will recess in the plastic foam of the respective transit case cover when the cover is closed.

f. Close and secure the covers of CY–6517/GSM–207 and CY–6515/GSM–206 by fastening the eight link locks on each transit case.

4–2. Repackaging

Repackaging of equipment for shipment or limited storage normally will be performed at a packaging facility or by a repacking team. If emergency packaging is required, select materials from those listed in SB 38–100. Package the equipment in accordance with the original packaging, as far as possible, with available materials.

Section II. DEMOLITION TO PREVENT ENEMY USE

4–3. Authority for Demolition

Demolition of the equipment will be accomplished only upon the order of the commander. Use the destruction procedures outlined in paragraph 4–4 to prevent further use of the equipment. The reporting of the destruction of the equipment must be made through command channels.

4–4. Methods of Destruction

The tactical situation and time available will determine the method to be used when destruction of equipment is ordered. In most cases, it is preferable to demolish completely some portions of the equipment rather than to partially destroy all equipment components.

a. Smash. Smash the interior components of the equipment. Remove components from their cases and smash as much of the circuitry as possible.

b. Cut. Cut all cables and wiring in a number of places.

***Warning:* Be extremely careful with explosives and incendiary devices. Use these items only when the need is urgent.**

c. Burn. Burn the technical manuals first. Burn as much of the equipment as is flammable. Use incendiary grenades to complete the destruction of the units.

d. Explode. Use explosives to completely demolish or cause maximum damage before burning; when time does not permit, complete demolition by other means. Powder charges, fragmentation grenades, or incendiary grenades

may be used. Incendiary grenades usually are most effective if destruction of small parts and wiring is desired.

e. Dispose. Bury or scatter destroyed parts, or throw them into nearby waterways. This is important if a number of parts have not been completely destroyed.

4-5. Priorities for Destruction

Priorities for destruction are directly related to information and equipment that could disclose frequencies, operating functions, maintenance, or deployment. Spare parts or assemblies of the equipment will be destroyed in the same order of priority. The order of destruction is as follows:

Priority	*Equipment*
1	Simulator, Code Plug SM-536/GSM-206
2	Technical Manual 11-6625-1730-12
3	Receiver, Antenna Orientation R-1556/GSM-207
4	Transmitter, Antenna Orientation T-1089/GSM-207
5	Test antenna for T-1089/GSM-207
6	Test Set, Code Plug TS-2718/GSM-206
7	Simulator, System Function SM-538/GSM-207
8	Attenuator, Variable CN-1258/GSM-2

APPENDIX A
REFERENCES

The following is a list of references applicable to the operation and maintenance of Test Set, Radio Data Set AN/GSM–206 and Antenna Orientation Set AN/GSM–207.

DA Pam 310–4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (Types 7, 8, and 9), Supply Bulletins, and Lubrication Orders
DA Pam 310–7	U.S. Army Equipment Index of Modification Work Orders
FM 5–25	Explosives and Demolitions
SB 11–573	Painting and Preservation Supplies Available for Field Use of Electronics Command Equipment
SB 38–100	Preservation, Packaging and Packing Materials, Supplies, and Equipment Used by the Army
TB SIG 364	Field Instructions for Painting and Preserving Electronics Command Equipment
TM 11–5895–698–12	Operator and Organizational Maintenance Manual, Radio Data Set AN/GSQ–113(V)
TM 11–5895–698–35	DS, GS, and Depot Maintenance Manual Including Repair Parts and Special Tool Lists, Radio Data Set AN/GSQ–113(V)
TM 11–6625–700–10	Operator's Manual: Digital Readout, Electronic Counter AN/USM–207
TM 11–6625–1730–45	GS and Depot Maintenance Manual Including Repair Parts and Special Tool Lists, Test Set, Radio Data Set AN/GSM–206 and Antenna Orientation Set AN/GSM–207
TM 38–750	Army Equipment Record Procedures

APPENDIX B
BASIC ISSUE ITEMS

Section I. INTRODUCTION

B-1. Scope

This appendix lists items comprising an operable equipment and those required for installation, operation, or operator's maintenance for Test Set, Radio Data Set AN/GSM-206 and Antenna Orientation Set AN/GSM-207.

B-2. Explanation of Columns

The following is a list of explanations of columns in sections II and III:

a. Source, Maintenance, and Recoverability Codes (SMR) Column.

(1) *Source code (S).* Not used.

(2) *Maintenance code (M).* The lowest category of maintenance authorized to install the item is indicated by the second code in the column. The maintenance category code and its explanation is—

Code	*Explanation*
C	Operator/crew

(3) *Recoverability code (R).* The recoverability code is the third code in the column. It indicates whether unserviceable items should be returned for recovery or salvage. Recoverability code and its explanation is as follows:

Note. When no code is indicated in the recoverability column, the part will be considered expendable.

Code	*Explanation*
R	Applies to repair parts and assemblies that are economically repairable at DSU and GSU activities and are normally furnished by supply on an exchange basis.

b. Federal Stock Number Column. This column indicates the Federal stock number for the item.

c. Description Column. This column includes the Federal item name and any additional description of the item which may be required. Usable on code column is not used.

d. Unit of Measure Column. The unit used as a basis of measure (e.g., ea, pr, ft, yd, etc.) is given in this column.

e. Quantity Incorporated in Unit Column. The total quantity of the item used in the equipment is given in this column.

f. Quantity Furnished With Equipment Column. This column lists the quantity of the item supplied for initial operation of the equipment and/or the quantities authorized to be kept on hand by the operator for maintenance of the equipment. Items to be requisitioned as required are indicated by an asterisk.

g. Illustrations Column.

(1) *Figure number (a).* The number of the illustration on which the item is shown is indicated in this column.

(2) *Item No. or reference designation (b).* The reference designation and/or item number callout used to reference the item on the illustration appears in this column.

B-3. Batteries

Dry batteries shown are used with the equipment but are not considered part of the equipment. They will not be preshipped automatically but are to be requisitioned in quantities necessary for the particular organization in accordance with SB 11-6.

308-836 O - 68 - 3

Section II. BASIC ISSUE ITEMS (AN/GSM–206)

(1) SMR code	(2) Federal stock No.	(3) Description: Reference number and manufacturer's code / Usable on code.	(4) Unit of measurement	(5) Quantity included in unit	(6) Quantity furnished with equipment	(7) Illustrations (a) Figure No.	(7) Illustrations (b) Item number or reference designation
—C–R	6625–803–2214	TEST SET, RADIO DATA SET AN/GSM–206: (This item is nonexpendable.)	ea	----------		1–1	
		TECHNICAL MANUAL TM 11–6625–1730–12. Requisition through pinpoint account number if assigned; otherwise through nearest Adjutant General facility. A quantity of one technical manual is packed with each equipment. Where a valid need exists, additional copies may be requisitioned and kept on hand.	ea	1	1	1–1	
—C		ATTENUATOR, VARIABLE CN–1258/GSM–206.	ea	1	1	1–5	
—C	6625–935–6991	CASE, TEST SET CY–6516/GSM–206	ea	1	1	1–1	
—C	6625–803–2242	SIMULATOR, CODE PLUG SM–536/GSM–206.	ea	1	1	1–6	
—C	6625–803–2220	TEST SET, CODE PLUG TS–2718/GSM–206.	ea	1	1	1–7	
—C	6135–926–0845	BATTERY BA–399/U	ea				
		NO ACCESSORIES, TOOLS, AND TEST EQUIPMENT ARE TO BE ISSUED WITH THIS EQUIPMENT					
		NO BASIC ISSUE ITEMS ARE MOUNTED IN OR ON THIS EQUIPMENT					

Section III. BASIC ISSUE ITEMS (AN/GSM–207)

(1) SMR code	(2) Federal stock No.	(3) Description: Reference number and manufacturer's code. Usable on code.	(4) Unit of measurement	(5) Quantity included in unit	(6) Quantity furnished with equipment	(7) Illustrations (a) Figure No.	(7) Illustrations (b) Item number or reference designation
—C–R	6625–803–2219	ANTENNA ORIENTATION SET AN/GSM–207: (This item is nonexpendable.)	ea	----------	----------	1–1	
		TECHNICAL MANUAL TM 11–6625–1730–12. Requisition through pinpoint account number if assigned; otherwise through nearest Adjutant General facility. A quantity of one technical manual is packed with each equipment. Where a valid need exists, additional copies may be requisitioned and kept on hand.	ea	1	1	1–1	
—C	6625–803–2188	CASE, ANTENNA ORIENTATION CY–6517/GSM–207.	ea	1	1	1–1	
—C	6625–803–2219	SIMULATOR, SYSTEM FUNCTION SM–538/GSM–207.	ea	1	1	1–2	
—C	6625–803–2191	RECEIVER, ANTENNA ORIENTATION R–1556/GSM–207.	ea	1	1	1–4	
—C	6135–926–0845	BATTERY BA–399/U----------	ea				
—C		CABLE ASSEMBLY, RADIOFREQUENCY.	ea	1	(*)	--------	3W1.
—C	6625–803–2200	TRANSMITTER, ANTENNA ORIENTATION T–1089/GSM–207.	ea	1	1	1–3	
		TRANSMITTER, ANTENNA ORIENTATION T–1089/GSM–207					
		ANTENNA, TEST----------	ea	1	(*)	1–3	
—C	6135–926–0845	BATTERY BA–399/U----------	ea				
—C		CABLE ASSEMBLY----------	ea	1	(*)	1–3	2W1.
		NO ACCESSORIES, TOOLS, AND TEST EQUIPMENT ARE TO BE ISSUED WITH THIS EQUIPMENT					
		NO BASIC ISSUE ITEMS ARE MOUNTED IN OR ON THIS EQUIPMENT					

APPENDIX C
MAINTENANCE ALLOCATION

Section I. INTRODUCTION

C–1. General

This appendix provides a summary of the maintenance operations covered in the equipment literature for Test Set, Radio Data Set AN/GSM–206 and Antenna Orientation Set AN/GSM–207. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

C–2. Explanation of Format for Maintenance Allocation Chart

a. Group Number. Group numbers correspond to the reference designation prefix assigned in accordance with ASA Y32.16, *Electrical and Electronics Reference Designations.* They indicate the relation of listed items to the next higher assembly.

b. Component Assembly Nomenclature. This column lists the item names of component units, assemblies, subassemblies, and modules on which maintenance is authorized.

c. Maintenance Function. This column indicates the maintenance category at which performance of the specific maintenance function is authorized. Authorization to perform a function at any category also includes authorization to perform that function at higher categories. The codes used represent the various maintenance categories as follows:

Code	*Maintenance category*
C----------	Operator/crew
O----------	Organizational maintenance
F----------	Direct support maintenance
H----------	General support maintenance
D----------	Depot maintenance

d. Tools and Equipment. The numbers appearing in this column refer to specific tools and equipment which are identified by these numbers in sections III and V.

e. Remarks. Self-explanatory.

C–3. Explanation of Format for Tool and Test Equipment Requirements

The columns in the tool and test equipment requirements chart are as follows:

a. Tools and Equipment. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool for the maintenance function.

b. Maintenance Category. The codes in this column indicate the maintenance category normally allocated the facility.

c. Nomenclature. This column lists tools, test and maintenance equipment required to perform the maintenance functions.

d. Federal Stock Number. This column lists the Federal stock number.

e. Tool Number. Not used.

Section II. MAINTENANCE ALLOCATION CHART (AN/GSM-206)

Group No.	Component assembly nomenclature	Maintenance functions										Tools and equipment	Remarks
		Inspect	Test	Service	Adjust	Align	Calibrate	Install	Replace	Repair	Overhaul	Rebuild	
1	TEST SET, RADIO DATA SET AN/GSM-206.	O	O	O	----	----	----	----	----	H	----	----	1, 4 1 thru 5	
1A	ATTENUATOR, VARIABLE CN-1258/GSM-206.	O	O	O	----	----	----	----	----	H	----	----	4 4, 5	
1B	SIMULATOR, CODE PLUG SM-536/GSM-206.	O	O	O	----	----	----	----	----	H	----	----	1, 4 1, 2, 4, 5	
1B1	PRINTED CIRCUIT BOARDS.	----	H	----	----	----	H	----	----	H	----	----	1, 2, 4, 5	
1C	TEST SET, CODE PLUG TS-2718/GSM-206.	O	O	O	----	----	----	----	----	----	----	----	4 2, 3, 4, 5	
1C1	PRINTED CIRCUIT BOARDS.	----	H	----	----	----	H	H	H	----	----	----	2, 3, 4, 5	

Section III. TOOL AND TEST EQUIPMENT REQUIREMENTS (AN/GSM-206)

Tools and equipment	Maintenance category	Nomenclature	Federal stock No.	Tool No.
1	O, H, D	ANTENNA ORIENTATION SET AN/GSM-207	6625-803-2219	
2	H, D	COUNTER, ELECTRONIC, DIGITAL READOUT AN/USM-207	6625-911-6368	
3	H, D	MULTIMETER AN/USM-223 (USE TS-352B/U UNTIL AVAILABLE).	6625-999-7465	
4	O, H, D	TEST SET, RADIO DATA SET AN/GSM-206	6625-803-2214	
5	H, D	TOOL KIT TK-100/G	5180-605-0079	

Section IV. MAINTENANCE ALLOCATION CHART (AN/GSM-207)

Group No.	Component assembly nomenclature	Maintenance functions										Tools and equipment	Remarks
		Inspect	Test	Service	Adjust	Align	Calibrate	Install	Replace	Repair	Overhaul	Rebuild	
1	ANTENNA ORIENTATION	O	O	O									1, 7
	SET AN/GSM-207.		H			H	H			H			1 thru 12
1A	RECEIVER, ANTENNA	O	O	O									1, 7
	ORIENTATION R-1556/ GSM-207.		H			H	H			H			1 thru 4, 6 thru 12
1A1	RF SUBASSEMBLY		H					H		H			1 thru 4, 6 thru 12
1A2	METER DRIVER ASSEMBLY.		H						H				5, 12
1B	SIMULATOR, SYSTEM	O	O	O									7
	FUNCTION SM-538/GSM-207.		H				H			H			5, 7, 12
1B1	PRINTED CIRCUIT BOARD.		H						H				5, 7, 12
1C	TRANSMITTER, ANTENNA	O	O	O									1, 7
	ORIENTATION T-1089/GSM-207.		H			H	H			H			1, 3 thru 12
1C1	PRINTED CIRCUIT BOARDS.		H					H		H			1, 4 thru 12

Section V. TOOL AND TEST EQUIPMENT REQUIREMENTS (AN/GSM-207)

Tools and equipment	Maintenance category	Nomenclature	Federal stock No.	Tool No.
1	O, H, D	ANTENNA ORIENTATION SET AN/GSM-207	6625-803-2219	
2	H, D	COUNTER, ELECTRONIC, DIGITAL READOUT AN/USM-207	6625-911-6368	
3	H, D	COUPLER, DIRECTIONAL CU-1278/U	5985-881-1553	
4	H, D	GENERATOR. SIGNAL SG-97/FRC	6625-351-5958	
5	H, D	MULTIMETER AN/USM-223 (USE TS-352B/U UNTIL AVAILABLE).	6625-999-7465	
6	H, D	OSCILLOSCOPE AN/USM-281 (USE AN/USM-140B UNTIL AVAILABLE).	6625-053-3112	
7	O, H, D	TEST SET, RADIO DATA SET AN/GSM-206	6625-803-2214	
8	H, D	WATTMETER AN/URM-98	6625-566-4990	
9	H, D	WAVEMETER FR-91/U	6625-532-4232	
10	H, D	DETECTOR HEWLETT-PACKARD #423A	6625-880-4978	
11	H, D	50-OHM TERMINATION TEKTRONIX #011-049-00	6625-880-3947	
12	H, D	TOOL KIT TK-100/G	5180-605-0079	

By Order of the Secretaries of the Army, the Navy, and the Air Force:

HAROLD K. JOHNSON,
General, United States Army,
Chief of Staff.

Official:
KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

J. P. SAGER,
Rear Admiral, United States Navy,
Vice Commander, Naval Air Systems Command.

J. P. McCONNELL, *General, USAF*
Chief of Staff

Official:
JOHN F. RASH, *Colonel, USAF*
Director of Administrative Services

Distribution:
Active Army:

USASA (2)
CNGB (1)
ACSC–E (2)
USAMB (10)
USAMC (5)
USACDCEC (10)
USACDCCEA (1)
USACDCCEA Ft Huachuca (1)
TOAD (10)
SAAD (10)
LEAD (7)
Gen Deps (Pac) (2)
Sig Sec Gen Dep (Pac) (5)
Sig Dep (Pac) (10)
Sig FLDMS (Pac) (2)
USAESC (30)
8th US Army (10)
USARPAC (5)
1st LOGCOMD (10)
Units organized under following TOE's (1 copy each):
11–158 11–597
11–587

NG: None.
USAR: None.
For explanation of abbreviations used, see AR 320–50.

U.S. GOVERNMENT PRINTING OFFICE : 1968—O-308-836